Case 1/1399 US

We Claim:

1. A compound of formula 1

wherein:

 R^1 is C_1 - C_4 -alkyl;

R² is C₁-C₄-alkyl; and

 R^3 is C_1 - C_4 -alkyl or phenyl, each optionally mono- or polysubstituted, or R^2 and R^3 together are -CH₂-CH₂- or -CH₂-CH₂-CH₂-,

or the corresponding acid addition salt with a pharmacologically acceptable acid.

2. The compound of formula 1 according to claim 1, wherein:

 R^3 is C_1 - C_4 -alkyl or phenyl, each optionally mono-, di-, tri-, or tetrasubstituted by one or more groups selected from C_1 - C_3 -alkyl, CF_3 , methoxy, ethoxy, hydroxy, fluorine, chlorine, bromine, -OCF₃, -CHF₂, -NHCOCH₃, and -NHSO₂CH₃, or R^2 and R^3 together are -CH₂-CH₂- or -CH₂-CH₂-CH₂-,

or the corresponding acid addition salt with a pharmacologically acceptable acid.

3. The compound of formula 1 according to claim 1, wherein:

 R^3 is C_1 - C_4 -alkyl or phenyl, each optionally mono-, di-, tri-, or tetrasubstituted by one or more groups selected from methyl, ethyl, CF_3 , methoxy, ethoxy, and hydroxy, or R^2 and R^3 together are - CH_2 - CH_2 - or - CH_2 - CH_2 - CH_2 -,

or the corresponding acid addition salt with a pharmacologically acceptable acid.

4. The compound of formula 1 according to claim 1, wherein:

 R^3 is C_1 - C_4 -alkyl or phenyl, each optionally mono-, di-, tri-, or tetrasubstituted by one or more groups selected from methyl, CF_3 , methoxy, and hydroxy, or R^2 and R^3 together are - CH_2 - CH_2 -,

or the corresponding acid addition salt with a pharmacologically acceptable acid.

5. A compound of formula 1 according to claim 1, wherein:

R¹ is methyl or ethyl;

R² is methyl; and

R³ is methyl, ethyl, or phenyl, each optionally mono-, di-, tri-, or tetrasubstituted by one or more groups selected from methyl, CF₃, methoxy, and hydroxy, or R² and R³ together are -CH₂-CH₂-,

or the corresponding acid addition salt with a pharmacologically acceptable acid.

6. The compound of formula 1 according to claim 1, wherein:

R¹ is methyl;

R² is methyl; and

R³ is methyl or phenyl, each optionally mono-, di-, or trisubstituted by one or more groups selected from methyl, ethyl, and hydroxy, or R² and R³ together are -CH₂-CH₂-, or the corresponding acid addition salt with a pharmacologically acceptable acid.

7. The compound of general formula 1 according to claim 1, wherein:

R¹ is methyl;

R² is methyl; and

R³ is methyl or phenyl, or R² and R³ together are -CH₂-CH₂-, or the corresponding acid addition salt with a pharmacologically acceptable acid.

- 8. A pharmaceutical composition comprising the compound of formula 1 according to one of claims 1 to 7 and a physiologically acceptable excipient.
- 9. A method for treatment of a disease which is responsive to a betamimetic in a patient, the method comprising administering to the patient in need thereof an effective amount of a compound of general formula <u>1</u> according to one of claims 1 to 7.
- 10. A method for treatment of asthma, chronic obstructive pulmonary disease (COPD), premature labor in midwifery (tocolysis), atrioventricular block, bradycardic heart rhythm

disorders, cardiovascular shock, or itching and irritation of the skin in a patient, the method comprising administering to the patient in need thereof an effective amount of a compound of general formula **1** according to one of claims 1 to 7.

- 11. A pharmaceutical composition comprising:
- (a) the compound of formula 1 according to one of claims 1 to 7; and
- (b) at least one other active substance selected from anticholinergics, antiallergics, PAF antagonists, PDE-IV inhibitors, leukotriene antagonists, p38 kinase inhibitors, EGFR kinase inhibitors, and corticosteroids.
- 12. The pharmaceutical composition of claim 11, further comprising a physiologically acceptable excipient.
- 13. A pharmaceutical composition comprising:
- (a) the compound of formula 1 according to one of claims 1 to 7; and
- (b) tiotropium bromide.
- 14. The pharmaceutical composition of claim 13, further comprising a physiologically acceptable excipient.
- 15. A pharmaceutical composition comprising:
- (a) the compound of formula 1 according to one of claims 1 to 7;
- (b) tiotropium bromide; and
- (c) at least one other active substance selected from anticholinergics, antiallergics, PAF antagonists, PDE-IV inhibitors, leukotriene antagonists, p38 kinase inhibitors, EGFR kinase inhibitors, and corticosteroids.
- 16. The pharmaceutical composition of claim 13, further comprising a physiologically acceptable excipient.